Subject: Re: Region inside the CONTOUR
Posted by James[1] on Tue, 02 Aug 2005 13:35:25 GMT
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Hi Ben,

Thank you very much for the answer ! Actually the reason, why I'm using
the CONTOUR procedure is the following. Actually the image structure is
quite messy and the contrast between the ROIs and the background is very
low.
I tried to apply some segmentation algorithms, but without much success.

On the other hand, since I need some quantative estimations of the
parameters,
I have to start with certain sigma level above the background (a threshold
for
object detection).

Also, I've read corresponding nice articles of David Fanning on his
website. But I'm asking here for a robust procedure which presumably has
been
already written by someone here.

Cheers,
James

> First is a heads up about contour... the N field of PATH_INFO structure
> is the number of vertices that make up the contour. From your
> description, it looks like you are assuming that N describes the number
> of pixels contained within the contour. This will be a gothcha unless
> you want to use the number of vertices as a size proxy.
>
> This is a great place to start regarding the ellipse fitting, etc. You
> may find that all of your questions are answered there.
>
> http://www.dfanning.com/documents/tips.html#ImageProcessing
>
> The IDL Image Processing User Guide is very helpful, too.
>
>
> Lastly, for most image and roi processing I have graviated away from
> CONTOUR toward the following (roughly outlined) path...
>
> Segment the image into foreground and background
>
> Use LABEL_REGION to 'colorize' the foreground features. Be aware that
> LABEL_REGION treats image edge pixels as background, so depending upon
> you needs you might want to pad the image with a border of pixels.

>
> Depending upon you needs you could use IMAGE_STATISTICS if that suits
> your needs or...
>
> Use HISTOGRAM and REVERSE_INDICES to extract the ROIs (you can filter
> based upon number of pixels at this time, retrieve the flux of original
> pixels, etc.)
>
> Convert the pixels indices to XY coords. Use one of David's boundary
> finding routines if you prefer to have the boundary instead.
>
> Pass the coords to IDLanROI as a convenient place holder. It has a
> number useful methods... to which you can add your own.
>
>
> You kind of have to fill in the details - but that seems to work quite
> well for me.
>
> Cheers,
> Ben
>